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## NOTICE OF ALLOWANCE AND FEE(S) DUE

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7590

03/18/2008

SPRINT 6391 SPRINT PARKWAY KSOPHT0101-Z2100 OVERLAND PARK, KS 66251-2100 EXAMINER

AJIBADE AKONAI, OLUMIDE

ART UNIT PAPER NUMBER

2617

DATE MAILED: 03/18/2008

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/659,647	09/10/2003	Mark Yarkosky	2052	3662

TITLE OF INVENTION: METHOD FOR DYNAMICALLY DIRECTING A WIRELESS REPEATER

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1440	\$0	\$0	\$1440	06/18/2008

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

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Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where m

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								(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVEN	TOR		ATTO	RNEY DOCKET NO.	CONFIRMATION NO.
10/659,647	09/10/2003		Mark Yarkosky				2052	3662
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nonprovisional	NO	\$1440	\$0		\$0		\$1440	06/18/2008
EXAM	MINER	ART UNIT	CLASS-SUBCLASS					
AJIBADE AKO	NAI, OLUMIDE	2617	455-453000					
1. Change of correspond CFR 1.363).  Change of corresp Address form PTO/S.  "Fee Address" ind PTO/SB/47; Rev 03-0 Number is required.	(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to							
PLEASE NOTE: Un	less an assignee is ident th in 37 CFR 3.11. Com	A TO BE PRINTED ON iffied below, no assignee pletion of this form is NO	data will appear on the	ne pa g an a	ntent. If an assign assignment. and STATE OR C	COUNT	RY)	ocument has been filed for
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10/659,647	09/10/2003	Mark Yarkosky	2052	3662	
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SPRINT			AJIBADE AKONAI, OLUMIDE		
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KSOPHT0101-Z2 OVERLAND PAF	100 RK, KS 66251-2100		2617 DATE MAILED: 03/18/200	8	

## **Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)**

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 208 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 208 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 (571)-272-4200.

	Application No.	Applicant(s)	
	10/659,647	YARKOSKY, MARK	
Notice of Allowability	Examiner	Art Unit	
	OLUMIDE T. AJIBADE AKONAI	2617	
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	ears on the cover sheet with the co (OR REMAINS) CLOSED in this applied or other appropriate communication GHTS. This application is subject to	orrespondence address plication. If not included will be mailed in due course. THIS	
1. This communication is responsive to <u>12/17/2007</u> .			
2. The allowed claim(s) is/are 32-45.			
3.	been received.  been received in Application No cuments have been received in this  of this communication to file a reply IENT of this application.  itted. Note the attached EXAMINER as reason(s) why the oath or declarate be submitted.  con's Patent Drawing Review ( PTO- as Amendment / Comment or in the Comment or in the Comment of BIOLOGICAL MATERIAL resit of BIOLOGICAL MATERIAL resit of BIOLOGICAL MATERIAL residues.	national stage application from the complying with the requirements  'S AMENDMENT or NOTICE OF tion is deficient.  948) attached  Office action of the back) of d).  must be submitted. Note the	
<ul> <li>Attachment(s)</li> <li>1. ☑ Notice of References Cited (PTO-892)</li> <li>2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)</li> <li>3. ☑ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 12/17/2007</li> <li>4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material</li> </ul>	5. ☐ Notice of Informal P 6. ☐ Interview Summary Paper No./Mail Dat 7. ☑ Examiner's Amendr 8. ☑ Examiner's Stateme 9. ☐ Other	(PTO-413), te	

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## **DETAILED ACTION**

#### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

Claim 38: On line 1, delete "38".

On line 1, insert "37" between "claim" and ",wherein".

# Allowable Subject Matter

2. Claims 32-45 are allowed.

The following is an examiner's statement of reasons for allowance: Regarding claim 32, Hoffman et al. (7,103,386) discloses a method for dynamically directing a wireless repeater, the wireless repeater having a processor, data storage, a mobile station modem, and an antenna, the method comprising: (a) the processor causing the antenna to sweep over a coverage area through increments and to thereby wirelessly receive signals; (b) at each increment, the mobile station modem determining a signal-to-noise ratio of the received signal; (c) the processor storing in the data storage the determined signal-to-noise ratios per increment; (d) the processor determining which increment has a strongest determined signal-to-noise ratio and responsively causing the antenna to radiate at the determined increment. The instant invention discloses (a) the processor causing the antenna to sweep over a coverage area through increments and

to thereby wirelessly receive forward link signals; (b) at each increment, the mobile station modem determining a signal-to-noise ratio of the received forward link signals (c) the processor storing in the data storage the determined signal-to-noise ratios per increment (d) the processor determining which increment has a strongest determined signal-to-noise ratio and responsively causing the antenna to radiate reverse link signals at the determined increment; and (e) repeating steps (a)-(d) at least once, to dynamically redirect the antenna to radiate at a different increment. The above novel features are neither taught, suggested nor made obvious by Hoffman et al or any other prior art of record. Claims 33-36 are rejected based on their being dependent on claim 32.

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Regarding claim 37, Hoffman et al (7,103,386) discloses a wireless repeater comprising: a donor antenna; a processor; data storage; a mobile station modem; wherein the processor is programmed to cause the donor antenna to sweep across a coverage area through increments so as to wirelessly receive signals; wherein the mobile station modem receives signals from the donor antenna and identifies characteristics of the received signals; wherein the processor is programmed to store in the data storage the identified characteristics per increment and to use the identified characteristics to select a given increment; wherein the processor is programmed to then cause the donor antenna to radiate signals at the selected increment. The instant invention discloses wherein the processor is programmed to cause the donor antenna to sweep across a coverage area through increments so as to wirelessly receive forward link signals from a plurality of base stations; wherein the mobile station modem

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receives the forward link signals from the donor antenna and identifies characteristics of the received forward link signals; wherein the processor is programmed to store in the data storage the identified characteristics per increment and to use the identified characteristics to select a given increment; wherein the processor is programmed to then cause the donor antenna to radiate amplified reverse link signals at the selected increment. The above novel features are neither taught, suggested nor made obvious by Hoffman et al or any other prior art of record. Claims 38-45 are rejected based on their being dependent on claim 37.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

## Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to OLUMIDE T. AJIBADE AKONAI whose telephone number is (571)272-6496. The examiner can normally be reached on M-F, 8.30p-5p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on 571-272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

OA

/Charles N. Appiah/ Supervisory Patent Examiner, Art Unit 2617